

US009411084B2

(12) United States Patent

Helmsworth

(10) Patent No.: US 9,411,084 B2

(45) **Date of Patent:** Aug. 9, 2016

(54) METHOD AND SYSTEM OF ILLUMINATING POURED SURFACES

(71) Applicant: Thomas Frederick Helmsworth,

Muscatine, IA (US)

(72) Inventor: Thomas Frederick Helmsworth,

Muscatine, IA (US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 105 days.

(21) Appl. No.: 14/481,159

(22) Filed: Sep. 9, 2014

(65) **Prior Publication Data**

US 2016/0070046 A1 Mar. 10, 2016

(51) Int. Cl.

 F21V 8/00
 (2006.01)

 F21V 33/00
 (2006.01)

 G02B 6/50
 (2006.01)

 F21W 111/023
 (2006.01)

(52) U.S. Cl.

(58) Field of Classification Search

CPC G02B 6/504; G02B 6/0008; F21V 33/006;

(56) References Cited

U.S. PATENT DOCUMENTS

2002/0159275	A1*	10/2002	Nicholls	A63C 19/02
2004/0032748	A1*	2/2004	Trudeau	362/559 B28B 23/0037
				362/554

* cited by examiner

Primary Examiner — Anh Mai

Assistant Examiner — Steven Horikoshi

(74) Attorney, Agent, or Firm — Dunlap Bennett & Ludwig PLLC

(57) ABSTRACT

A method of illuminating poured surfaces is provided. The method embeds fiber optic strands into poured surfaces during the formation thereof. Each fiber optic strand may be supported by a positioning apparatus prior to and during the pouring and setting of the poured surface, wherein no part of the positioning apparatus is visible above a top surface of the operable poured surface, yet the fiber optic strands are exposed near the top surface so as to form desired patterns of points of light.

5 Claims, 3 Drawing Sheets

